

REMARKS

Claims 1-7 were previously pending in this application. Applicants respectfully request reconsideration of the Application in view of the foregoing amendments and the following remarks.

Specification

The Abstract has been objected to because it exceeds the limit of 150 words. See Office Action, 02/06/06, p. 2. Applicants have amended the Abstract and respectfully request withdrawal of this objection.

Claim Objections

Claim 5 has been objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See Office Action, 02/06/06, p. 4. Applicants respectfully request withdrawal of these objections in view of the following remarks.

Claim Rejections – 35 U.S.C. § 102

Claims 1 and 6-7 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kato et al., U.S. Patent No. 6,129,532. Claims 1, 4 and 7 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Tamura et al., U.S. Patent No. 4,997,350. Applicants respectfully submit that claims 1, 4 and 6-7 are patentably distinct from the cited references.

Independent claim 1 recites:

A compressor having an oil supply area, a lubrication target area to be lubricated, and a lubricating oil transport area for intermittently transporting lubricating oil to said lubrication target area by alternately communicating with said oil supply area and said lubrication target area.

Applicants submit that Kato et al. cannot anticipate independent claim 1 because their invention does not teach every element of this claim. See MPEP § 2131. Kato et al. disclose a CO₂ compressor having an intermittent oil supply mechanism for forcing and moving lubricant under a discharge pressure in incremental amounts. The February 6, 2006 Office Action specifically states that Kato et al. disclose an oil supply area (45a), a lubricating oil transport area (45b, 45e) and a lubricating target area (47) for intermittently transporting lubricating oil to the lubrication target area by alternately communicating with the oil supply area and the lubrication area. To the contrary, however, Kato et al. do not intermittently transport oil “by alternately communicating with the oil supply area and the lubrication area.” Quite differently, and clearly apparent from Figure 3, the invention of Kato et al. discloses an oil path (45a) which directly communicates with the lubricating target area, i.e., a swash plate chamber (47), via a lubricating oil transporting area (45b, 45e). In other words, when the inlet of the lubricating oil transport area (45b, 45e) is inline with the outlet of oil path (45a), there is a direct line of communication between the oil supply area (45a) and the lubricating target area (47). Because of this direct communication between the oil supply area (45a) and the lubricating target area (47), it is likely that leakage of an excessive amount of lubricating oil may be caused in response to the pressure differential across the oil supply area (45a) and lubricating target area (47).

In sum, Kato et al. disclose a way to limit the discharge of lubricating oil to the swash plate chamber by quickly opening and closing a lubricating transport area. Kato et al. do not disclose an oil supply which alternately communicates with the lubrication target area. Instead, the oil supply area (45a) in Kato et al. simply communicates or does not communicate with the lubrication target area (47) -- similar in nature to a simple "on/off" switch. See Kato et al., col. 6, lines 30-58. Thus, the direct passage in Kato et al. does not prevent excessive delivery of lubricating oil. In fact, Kato et al. teaches away from Applicants' invention by focusing on the elimination of valves -- the disclosure makes no mention of eliminating a direct passage between an oil supply area and lubricating target area for the purpose of eliminating leakage of excess lubricating oil.

The February 6, 2006 Office Action further indicates that Tamura et al. disclose an oil supply area (20), a lubricating oil transport area (26) and a lubricating target area (17) for intermittently transporting lubricating oil to the lubrication target area by alternately communicating with the oil supply area and the lubrication target area. Similar to the invention of Kato et al., Tamura et al. are silent as to a mechanism which intermittently transports oil "by alternately communicating with the oil supply area and the lubrication area." Apparent from the Specification and Figures 2-4, Tamura et al. clearly disclose an oil path (20) which directly communicates with the lubricating target area (25), i.e., roller bearing (17), via a lubricating oil transporting area (26).

Applicants, on the other hand, claim an apparatus wherein the oil supply area (29, 23) is never directly connected to the lubrication target area (7). This reliably prevents sudden entry of lubricating oil even when the pressure difference between the lubrication target area and

oil supply area is substantial. Thus, not only does Applicants' invention prevent clogging of the oil supply hole by foreign substances, but it advantageously avoids performance degradation caused by leakage of excess lubricating oil. In essence, the alternately communicating mechanism, i.e., between the oil supply area and the lubricating target area, prevents any substantial amount of lubricating oil from flowing into the lubricating target area.

For at least the above reasons, Applicants respectfully submit that the cited references do not teach or suggest each and every element recited in independent claims 1 and 7 or claims 4 and 6 depending therefrom. Accordingly, these claims define patentable subject matter over the cited references and Applicants respectfully request withdrawal of these grounds of rejection.

Claim Rejections - 35 U.S.C. § 103

Claims 2 and 3 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato et al. in view of Ikeda et al., U.S. Patent No. 5,733,107. Applicants respectfully submit that claims 2 and 3 are patentably distinct from the cited references, taken either alone or in combination.

The Examiner admits that Kato et al. do not teach that the lubricating oil is a lubricating oil that has been separated from a discharged refrigerant but contends that the device disclosed in Ikeda et al. for separating oil mist from gas within a compressor renders claims 2 and 3 obvious in view of Kato et al. For the reasons set forth above, Kato et al. do not render Applicants' invention obvious under 35 U.S.C. § 103(a) and Ikeda et al. do not remedy this deficiency.

Serial No. 09/926,144
Response dated May 2, 2006
Reply to Office Action dated February 6, 2006

Docket No. 5000-4943

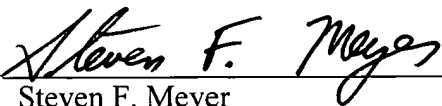
For at least these reasons, Applicants submit that dependent claims 2 and 3 are patentably distinct from the cited references, taken either alone or in combination. Therefore, Applicants request withdrawal of this ground of rejection.

CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of the claims and allowance of this Application.

Respectfully submitted,
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Dated: May 2, 2006

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